

pathological indications for the operation are osteomyelitis, white swelling of the shoulder joint, malignant tumors and in exceptional cases aneurysms inaccessible to other means of treatment. Of the 20 cases for tumors, in 9 the primary seat was in the scapula, in 6 at the upper end of the humerus, whilst in 5 it was not given. In large tumors of the scapula the operations to be considered are resection, total removal, and amputation of arm and shoulder. The latter shows slightly less relapses than total removal of the bone; resection has less mortality but more relapses. Resection with preservation of the arm should be preferred wherever practicable, but is counter-indicated where the axillary vessels or the joint and upper part of the arm are involved, at times where the tumor is of great size, where the skin is considerably involved or ulcerated or the axillary glands are already infiltrated. An exploratory incision is hardly advisable, as, if the major operation is to be done, the vessels should first be ligated. Counter-indications to the interscapulo-thoracic amputation are the same as in all malignant tumors—inability to remove all that is diseased. This operation for tumors of the humerus he justifies where simple amputation would be insufficient.

Of the 13 cases for traumatism, 2 were for shot wounds, 4 for maiming by machinery, 6 for tearing off of the limb and 1 uncertain. His method of operating has already been described in the *ANNALS*. Various modifications of other surgeons are also included.

A general bibliography of the subject is appended, besides additional references in the text as the literature bearing on this question is included under that of operations in general on the scapula. Scattered through the body of the work are several illustrations, and at the end are two lithographs of the applied surgical anatomy.

WM. BROWNING.

*MANUAL PRACTICO DE CIRURGIA ANTISEPTICA.* Par el Dr. CARDENAL, Director del Hospital de Utra. Sra, del Sagrado Corazon de Jesus, etc. Segunda Edición. Con grabados intercalados y láminas aparte cromolithografiadas. Barcelona: Espasa y Ca, 1887.

*PRACTICAL HANDBOOK OF ANTISEPTIC SURGERY.* By Dr. CARDENAL. Second edition. Illustrated.

*ANLEITUNG ZUR WUNDBEHANDLUNG.* Von Dr. MAXIMILIAN SCHAECHTER, Operateur der 1. Chir. Universitätsklinik zu Budapest. Wiesbaden. J. F. Bergmann, 1887.

*GUIDE TO THE TREATMENT OF WOUNDS.* By Dr. M. SCHAECHTER, Operator in the University Clinic of Budapest.

The work of Dr. Cardenal is a large, attractive, profusely illustrated, finely printed work of over 700 pages. It is put into the form of lectures, and therefore is didactic and elementary in its scope, but is at the same time comprehensive and thorough in the way in which it presents the antiseptic idea and practice of the present day. Almost every page presents references to English, French, German or American authorities, and it is evident that the author, with great judgment and discrimination, has made use of every source of information of any value upon which to draw for the purpose of presenting to his compatriots an adequate statement of his subject. His style is clear, his conclusions are plainly stated, being wonderfully free from verbiage and obscurity of diction. The work is systematic in its plan; it begins with a discussion of the pathology and therapeutics of inflammation. His definition of this apparently undefinable condition is that it is "*a disorder of nutrition in living tissues, produced by the penetration into them of a markedly deleterious substance from without, which declares itself by the temporary exaggeration of the nutritive processes, with a tendency to the formation of excessive exudates and to their transformation into pus.*"

Of course these "markedly deleterious substances from without" which are the essential cause of destructive inflammation are micro-organisms, and their entrance into the tissues is described by the term "infection." This is the corner-stone of the antiseptic fabric. The reasons for such a doctrine are clearly and well given by the author in his first chapters.

The next chapters deal with wounds in general, both subcutaneous and open, together with the subjects of shock, septicæmia and pyæmia. This leads to the therapeutics of wounds, and the discussion of the place in wound-treatment of rest, drainage and antisepsis, with a review of the results of antiseptic methods. Next, in the seventh lecture, antiseptic apparatus and materials are described. The practice of antisepsis in surgical operations, and in the treatment of accidental traumatisms, the treatment of the complications of surgical and accidental traumatisms, the treatment of common and specific, acute and chronic inflammatory affections, occupy successive lectures. Then follows a lecture on modifications and innovations introduced by antisepsis into the principal surgical operations. A short lecture describing various modifications of the strict antiseptic method concludes the volume proper, but an appendix is added devoted to a description of the method and processes of bacterial technology.

Our examination of this book has given us great pleasure. It is ev-

idently the work of a surgeon who combines a talent for industry and research, with practical experience and enthusiasm, and a clear conception of what kind of knowledge is required by one who would be abreast of the surgery of to-day. It puts at the command of Spanish-speaking surgeons the whole literature of the subject of antiseptic surgery.

As yet we have no work in the English language which can compare with it in its peculiar field.

Dr. SCHAECHTER's work is a book of about 340 pages, closely printed, without an illustration, minutely systematic in its plan, and thorough and exhaustive in its treatment of all matters connected with the present status of wound-treatment. The copy before us is a German edition of a work written also in the Hungarian language; the author is connected with the surgical clinic of the Hungarian University at Budapest, and acknowledges Prof. von Kovás, of that University as the inspirer and director of his work. What Dr. Cardenal has done for his compatriots in Spain by his work, Dr. Schaechter has also done for his Hungarian colleagues. Both of these works serve as witnesses to the positive and enduring character of the changes which surgery has witnessed within recent years in its knowledge of the pathology and treatment of wounds. They are not reports of progress, nor argumentative exhibits, nor masses of clinical reports, but are thorough and comprehensive statements of settled facts. The antiseptic doctrine and practice has emerged from the period of experiment and argument, and is now an established canon of surgery.

Schaechter divides his book into five parts; in the first he treats of wound-healing and its disturbances; in the second, of the conditions of wound-healing and the indications for treatment; in the third, of antiseptics and of the materials and methods of antiseptic wound-treatment; in the fourth, of special wounds; in the fifth, he describes the methods of antiseptic practice adopted in the surgical clinic of the university at Budapest. Some general reflections upon the subject of antiseptic wound-treatment conclude the volume. Here he shows a philosophical and broad spirit. The particular antiseptic, he says, is not of so much importance, but the manner in which it is used is everything; the hæmostasis, the coaptation of the wound-surfaces, the drainage and the application of the dressing, these play the greatest part in determining the result. The recognition of this is the key by which good results may be obtained with varying means. The nearer we can obtain cleanliness without the use of chemical agents, the

nearer are we to the ideal wound-treatment, which is *perfect asepsis without antiseptics*.

The book as a whole is of great value, especially from the completeness with which it presents all the various agents and methods which are available to the surgeon in efforts to prevent or overcome sepsis.

L. S. PILCHER.

DIE KRANKHEITEN DER AUSSEREN WEIBLICHEN GENITALIEN UND DIE DAMMRISSE. Von Prof. Dr. PAUL ZWEIFEL. Lieferung 61, Deutsche Chirurgie: herausgegeben von Prof. Dr. Billroth, und Prof. Dr. Luecke. Stuttgart: Ferdinand Enke. 1886.

THE DISEASES OF THE EXTERNAL FEMALE GENITALS, AND LACERATIONS OF THE PERINEUM. By Dr. PAUL ZWEIFEL, Professor at Erlangen.

Like some of its predecessors reviewed in these columns, from time to time, this installment of the colossal work on German surgery edited by Profs. Billroth and Luecke gives abundant internal evidence of the nationality of its author.

Dr. Zweifel has the true German love for minuteness, and he crawls over his subject with indefatigable industry. No doubt, in a work of reference, such as the entire compilation is intended for, this laboriousness has its justification; but even in this regard there is good ground for criticism in the part before us in the scanty references to American gynecology, compared with German or even English.

In assigning the subject matter of this treatise the editors have followed the ordinary course of most writers on gynecology; but the divisions chosen are so entirely arbitrary, having no logical justification pathologically, that the result is necessarily somewhat unsatisfactory.

For instance, what could be more artificial than to treat inflammatory conditions of the vulva in one book, those of the vagina in another, while those of the uterus and tubes are considered in a third.

We urge this not in fault-finding with Dr. Zweifel, who, of course, has his province assigned him, but because it suggests a defect in a great deal of our current medical literature, namely, the writing up of one little area in the body almost regardless of its relations to the other portions.

Turning now to the book itself, the two opening chapters on development and malformations are among the best in the book; the author briefly summarizes the most remarkable cases on record, and